Steve Bartow
Brunk Corporation
803 Logan Street
Goshen, IN 46528

Re: Registered Construction and Operation Status,
039-12595-00545

Dear Mr. Bartow:

The application from Brunk Corporation received on August 9, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following source, to be located at 803 Logan Street, Goshen, Indiana, is classified as registered:

(a) One (1) natural gas heating unit with heat input rate of 0.15 million Btus, exhausting to the atmosphere at Stack H-1;

(b) One (1) natural gas heating units with heat input rate of 0.2 million Btus, exhausting to the atmosphere at Stack H-2;

(c) Nineteen (19) storage silos (including 6 new units, which have yet to be constructed) with bag filtration units, exhausting to the atmosphere;

(d) Twelve (12) plastic grinders vented to baghouses DC 1 through DC 4, exhausting to the atmosphere;

(e) Six (6) box filling machines vented to baghouse DC 1 through DC4, exhausting to the atmosphere;

The following conditions shall be applicable:

(a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minute (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

(b) Pursuant to 326 IAC 6-4-2 (Fugitive Emissions), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions limit for the plastic grinding operation shall be determined using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dust collectors shall be in place at all times the plastic grinders are in operation to comply with this limit.

(d) Bag House Operating Conditions
The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the plastic bead grinding process, at least once weekly when the plastic grinding process is in operation when venting to the atmosphere. The pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test.

The instrument used for determining the pressure shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading. The pressure gauge shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

An inspection shall be performed each calender quarter of all bags controlling the plastic bead grinding operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency.

This is a new registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015

Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

ERG/RB

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance - Paul Karkiewicz - Northern Region Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**Brunk Corporation**
Address:	**803 Logan Street**
City:	**Goshen, Indiana**
Authorized individual:	**Steve Bartow**
Phone #:	**(219) 533-1109**
Registration #:	**039-12595-00545**

I hereby certify that Brunk Corporation is still in operation and is in compliance with the requirements of Registration 039-12595-00545.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management (IDEM)
Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	**Brunk Corporation**
Source Location:	**803 Logan Street, Goshen, Indiana 46528**
County:	**Elkhart**
Construction Permit No.:	**039-12595-00545**
SIC Code:	**3564**
Permit Reviewer:	**ERG/RB**

The Office of Air Management (OAM) has reviewed an application from Brunk Corporation relating to the construction and operation of a plastic bead grinding facility. This facility has not been issued a permit in the past for these operations.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following emission units:

(a) One (1) natural gas heating unit with heat input rate of 0.15 million BTUs, exhausting to the atmosphere at Stack H-1;

(b) One (1) natural gas heating units with heat input rate of 0.2 million BTUs, exhausting to the atmosphere at Stack H-2;

(c) Thirteen (13) storage silos with bag filtration units, exhausting to the atmosphere;

(d) Twelve (12) plastic grinders vented to baghouses DC 1 through DC 4, exhausting to the atmosphere;

(e) Six (6) box filling machines vented to baghouse DC 1 through DC 4, exhausting to the atmosphere;

New Emission Units

(a) Six (6) storage silos with bag filtration units, exhausting to the atmosphere.

Existing Approvals

The source has no previous approvals to operate.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled “Unpermitted Emission Units and Pollution Control Equipment.”

(b) IDEM is reviewing this matter and will take appropriate action. This proposed registration is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 9, 2000.

Emissions Calculations

See Appendix A of this document for detailed emission calculations (3 pages).

Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	15.76
PM-10	15.76
SO_2	0.0009
VOC	0.0084
CO	0.1288
NO_x	0.1533

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs are less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(c) The potential to emit is less than 25 tons per year. Therefore, the source is subject to Registration 326 IAC 2-5.5.

County Attainment Status

The source is located in Grant County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Maintenance
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Elkhart County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP-039-12595-00545, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This source is a new source and this application is their first air approval, even though the source is existing. It is a CWOP/OWOP and did not have any permit before. It is referred to as a “new source” in terms of permitting.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County and the potential to emit of VOC or NO_x is less then 10 tons per year, therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4-2 (Fugitive Emissions)

Pursuant to 326 IAC 6-4-2 (Fugitive Emissions), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions limit for the plastic grinding operation shall be determined using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dust collectors shall be in place at all times the plastic grinders are in operation to comply with this limit.

Conclusion

The operation of this plastic beads grinding facility shall be subject to the conditions of the attached proposed Registration No. CP-039-12595-00545.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
Natural Gas Furnaces (4)

Company Name: **Bunk Corp**
Address City IN Zip: **803 Logan Street, Goshen, Indiana 46528**
Reg: **039-12595**
Plt ID: **039-00545**
Reviewer: **ERG/RB**
Date: **08/25/2000**

Heat Input Capacity (per furnace) MMBtu/hr	Potential Throughput (per furnace) MMCF/yr
0.15	1.3
0.20	1.8
Total	3.1

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0117	0.0117	0.0009	0.1533	0.0084	0.1288

*PM and PM10 emission factors are combined fitlerable and condensable PM and PM10, respectively.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
Natural Gas Furnaces (4)
HAPs Emissions

Company Name: **Bunk Corp**
Address City IN Zip: **803 Logan Street, Goshen, Indiana 46528**
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Plt ID: **039-00545**
Reviewer: **ERG/RB**
Date: **08/25/2000**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr (per furnace)	0.00	0.00	0.00	0.00	0.00
Potential Emission in tons/yr (total)	0.00	0.00	0.00	0.00	0.00

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr (per furnace)	0.00	0.00	0.00	0.00	0.00
Potential Emission in tons/yr (total)	0.00	0.00	0.00	0.00	0.00

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations

Particulate Matter Emissions from Plastic Bead Grinding,Transfer, Storage, and Packaging Operations

Company Name: **Bunk Corp**
Address City IN Zip: **803 Logan Street, Goshen, Indiana 46528**
Reg: **039-12595**
Plt ID: **039-00545**
Reviewer: **ERG/RB**
Date: **08/25/2000**

Calculation of PTE, Actual Emissions

Amount of PMcollected in baghouses	3.56	lb/hr
Collection effiency	99.00%	
Uncontrolled emissions	3.60	lb/hr
Potential emissions (@8760 hrs/yr)	15.75	tons/yr